49



United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/503,096	02/11/2000	Katherine Grace August	07007.00011	6097
30594	7590 12/08/2003		EXAMINER	
HARNESS, DICKEY & PIERCE, P.L.C.			TRUONG, THANHNGA B	
P.O. BOX 89 RESTON, V			ART UNIT	PAPER NUMBER
,			2172	C
			DATE MAILED: 12/08/2003	3 . 6

Please find below and/or attached an Office communication concerning this application or proceeding.

	L Application No.	(A-1:4/-)				
	Application No.	Applicant(s)				
Office Action Symmony	09/503,096	AUGUST ET AL.				
Office Action Summary	Examiner	Art Unit				
The MAIL ING DATE of this communication on	Thanhnga Truong	2172				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). Status						
1) Responsive to communication(s) filed on 11 F	<u> February 2000</u> .					
	is action is non-final.					
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims						
4) Claim(s) 1-26 is/are pending in the application	n.					
4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1-26</u> is/are rejected.						
7) Claim(s) is/are objected to.)□ Claim(s) is/are objected to.					
8) Claim(s) are subject to restriction and/or election requirement.						
Application Papers						
9) The specification is objected to by the Examiner.						
10)⊠ The drawing(s) filed on <u>11 February 2000</u> is/are: a)⊠ accepted or b)□ objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
11) The proposed drawing correction filed on is: a) approved b) disapproved by the Examiner.						
If approved, corrected drawings are required in reply to this Office action.						
12)☐ The oath or declaration is objected to by the Examiner.						
Priority under 35 U.S.C. §§ 119 and 120						
13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).						
a) ☐ All b) ☐ Some * c) ☐ None of:						
1. Certified copies of the priority documents have been received.						
2. Certified copies of the priority documents have been received in Application No						
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 						
14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).						
 a) ☐ The translation of the foreign language provisional application has been received. 15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121. 						
Attachment(s)						
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2	5) Notice of Informal	y (PTO-413) Paper No(s) Patent Application (PTO-152)				
U.S. Patent and Trademark Office						

Art Unit: 2172

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 1. U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- Claims 1-26 are rejected under 35 U.S.C. 102(e) as being anticipated by 2. Chen et al (US 6,314,192).
 - Referring to claim 1: a.
 - i. Chen teaches:
- (1) embedding a watermark within said principal program prior to transmission to said one or more subscribers [i.e. as shown in Figure 1, embedding a digital watermark signal into a host signal (for example, a particular copy of a software product sold to a customer) (column 1, lines 22-25)]; and
- (2) decoding said embedded watermark to determine the specific related data to be transmitted to said one or more subscribers [i.e., "decoding" functions that seek to extract the watermark signal from the composite signal. Such functions may also be referred to as transmitting and receiving functions, indicating that the composite signal is transmitted over a channel to the receiver (column1, 34-38)].
 - b. Referring to claim 2:
 - Chen further teaches:
- (1) wherein said decoding step further comprises decoding said watermark at a receiver located at said one or more subscribers [i.e., as shown in Figure 9, from the receiver end, replicator 930 provides values 922 to

Art Unit: 2172

point decoder 930 for decoding each watermark-signal component embedded in each co-processed group of host-signal components (column 34, lines 55-58)].

c. Referring to claim 3:

- i. Chen further teaches:
- (1) receiving said principal program at a central location [i.e., as shown in Figure 1, computer system 110b, that is, for "receiving said principal program at a central location"];
- (2) decoding said embedded watermark at said central location [i.e., as shown in Figure 2b, information extractor 202, that is, for "decoding said embedded watermark at said central location"]; and
- said specific data related to said principal program to said one or more subscribers through a communications network [i.e., "decoding" functions that seek to extract the watermark signal from the composite signal. Such functions may also be referred to as transmitting and receiving functions, indicating that the composite signal, which inherently includes "special data", is transmitted over a channel to the receiver (column1, 34-38). For example, an 8-bit identification number may be a watermark signal to be embedded in a host signal, such as the illustrative 256.times.256 pixel picture. As indicated by the definition of "signal" above, it will be understood that a watermark signal need not be an identification number or mark, but may be any type of signal whatsoever. A watermark signal also may have been subject to error-correction, compression, transformation, or other signal processing (column 8, line 67 through column 9, lines 1-12)].

d. Referring to claim 4:

- i. Chen teaches:
- (1) determining whether said principal program includes an embedded watermark [i.e., "host signal" means a signal into which a watermark signal is to be embedded (column 7, lines 62-63)];
- (2) decoding said embedded watermark from said principal program [i.e., "decoding" functions that seek to extract the watermark

Page 4

Application/Control Number: 09/503,096

Art Unit: 2172

signal from the composite signal. Such functions may also be referred to as transmitting and receiving functions, indicating that the composite signal is transmitted over a channel to the receiver (column1, 34-38)]; and

(3) in response to said watermark, transmitting said specific related data to said one or more subscribers, over a communications network [i.e., "transmit" means to enable a signal (typically, a composite signal) to be transferred from an information embedding system to an information extracting system over a communication channel (column 8, lines 51-54)].

e. Referring to claim 5:

i. This claim has limitations that is similar to those of claim 3(2), thus it is rejected with the same rationale applied against claim 3 (2) above.

f. Referring to claim 6:

i. This claim has limitations that is similar to those of claim 3, thus it is rejected with the same rationale applied against claim 3 above.

g. Referring to claim 7:

i. Chen further teaches:

specific related data stored in a database, further comprising the step of retrieving said specific data from said database prior to said transmitting step [i.e., Figure. 4B is one illustrative embodiment of watermark signal 102 that is an eight-bit message; for example, a binary serial number. There are thus 256 possible serial numbers. As is evident, such illustrative serial numbers may be the binary numbers themselves, or the binary numbers may represent numbers, text, or other representations contained in a look-up table, or other data structure, indexed by the binary numbers or related pointers (column 16, lines 22-30). Figure 2A shows the "decoding" functions that seek to extract the watermark signal from the composite signal. Such functions may also be referred to as transmitting and receiving functions, indicating that the composite signal, which inherently includes "special data", is transmitted over a channel to the receiver (column1, 34-38)].

Art Unit: 2172

h. Referring to claim 8:

i. This claim has limitations that is similar to those of claim 7, thus it is rejected with the same rationale applied against claim 7 above.

i. Referring to claim 9:

- i. Chen further teaches:
- (1) wherein said central location is a re-broadcaster of said principal program to said one or more subscribers [i.e., in this application, each commercial is watermarked, and automated detection of the watermark is used to determine the number of times and time of day that the broadcaster, which is computer system 110a, played the commercial (column 1, lines 49-52)].
 - j. Referring to claim 10:
 - i. Chen further teaches:
- (1) wherein said re-broadcaster is the Head-end office of a cable provider [i.e., "the Head-end office of a cable provider" is considered a computer system 110a in Figure 1].
 - k. Referring to claim 11:
 - Chen further teaches:
- (1) wherein said re-broadcaster is a satellite broadcast transmitter station [i.e., "a satellite broadcast transmitter station" is considered a computer system 110a in Figure 1].
 - I. Referring to claim 12:
 - i. Chen further teaches:
- (1) wherein said re-broadcaster is an Internet service provider [i.e., "an Internet service provider" is considered as a computer system 110a in Figure 1].

m. Referring to claim 13:

- i. Chen further teaches:
- (1) appending demographic data to said secondary specific related data prior to said transmitting step, wherein said transmitting said specific related data includes transmitting said demographic data [i.e., "host signal"

Art Unit: 2172

means a signal into which a watermark signal is to be embedded. In one illustrative example, a host signal is a black-and-white image having 256.times.256 (=65,536) pixels, that is, "a demographic data", whereas each pixel having a grey scale value (column 7, lines 62-65). "Transmit" means to enable a signal (typically, a composite signal) to be transferred from an information embedding system to an information extracting system over a communication channel (column 8, lines 51-54)].

n. Referring to claim 14:

- i. Chen teaches:
- (1) a decoder for decoding a watermark embedded in a principal program, wherein said watermark contains data from which said specific related data may be identified [i.e., as shown in Figure 9, a point decoder, that is, for "decoding a watermark embedded in a principal program", wherein reconstructed watermark signal 106 includes "data from which said specific related data may be identified"]; and
- (2) delivery means for delivering said specific data related to said principal program to a receiving device associated with said one or more subscribers [i.e., as shown in Figure 1, transmitter 120, which transmits a signal, which inherently includes "specific data related to said principal program", over communication channel 115 for reception by receiver 125 (column 11, lines 10-12)].

o. Referring to claim 15:

i. This claim has limitations that is similar to those of claim 14, thus it is rejected with the same rationale applied against claim 14 above.

p. Referring to claim 16:

- Chen further teaches:
- (1) wherein said delivery means for delivering said specific related data is an ADSI server and said receiving device is an ADSI device [i.e., "an ADSI server" is consider a transmitter 120 (as shown in Figure 1) for

Art Unit: 2172

transmitting "specific related data" and "an ADSI device" is considered a receiver 125 (as shown in Figure 1)].

q. Referring to claim 17:

- i. Chen further teaches:
- (1) wherein said delivery means for delivering said specific related data is an IP server and said receiving device is an Internet enabled application running on a web enabled device associated with said one or more subscribers [i.e., "an IP server" is considered a transmitter 120 (as shown in Figure 1) and "an Internet enabled application running on a web enabled device" is considered a receiver 125 (as shown in Figure 1)].
 - r. Referring to claim 18:
 - i. Chen further teaches:
- (1) wherein said delivery means for delivering said specific related data is a radio transmitter [i.e., "a radio transmitter" is considered a transmitter 120 (as shown in Figure 1) for transmitting "specific related data"].
 - s. Referring to claims 19, 20, 21 and 22:
 - i. Chen further teaches:
- (1) wherein said receiving device is a FM radio receiver, a wireless telephone, a page, or a remote control device [i.e., "a FM radio receiver, a wireless telephone, a page, or a remote control device" is considered a receiver 125 (as shown in Figure 1)].
 - t. Referring to claims 23 and 24:
 - i. Chen further teaches:
- (1) wherein said delivery means for delivering said specific related data is a television broadcast transmitter or a set top box [i.e., "a television broadcast transmitter or a set top box" is considered a transmitter 120 (as shown in Figure 1) for transmitting "specific related data"].
 - u. Referring to claim 25:
 - i. Chen further teaches:

Application/Control Number: 09/503,096

Art Unit: 2172

(1) a transmitter for transmitting said principal program with said watermark embedded therein from a point of origin to a destination [i.e., as shown in Figure 1, transmitter 120 transmit a host signal into which a watermark signal is to be embedded (column 7, lines 62-63) from computer system 110A, that is "a point of origin" through a communication channel 115 to a computer system 110B, that is "a destination"].

v. Referring to claim 26:

- i. Chen further teaches:
- (1) delivery means for delivering said principal program to said one or more subscribers [i.e. as shown in Figure 1, transmitter 120 transmits an embedding a digital watermark signal into a host signal (for example, a particular copy of a software product sold to a customer) (column 1, lines 22-25)].

Conclusion

- 3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
- a. Chapman et al (US 6,216,228) discloses a method and a system for automatically controlling display of video or image data in dependence on content classification information which is integrated within the data by means of invisible digital watermarking techniques (see abstract).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thanhnga (Tanya) Truong whose telephone number is 703-305-0327.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Vu can be reached on 703-305-4393. The fax and phone numbers for the organization where this application or proceeding is assigned are 703-872-9306 for regular communications and 703-746-7238 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

Application/Control Number: 09/503,096

Art Unit: 2172

Page 9

TBT

November 21, 2003

PORY PATENT EXAMINER